

CLAIMS

1. System for the execution of secure transactions in a multimedia network, comprising a multimedia network with customer stations (2), merchant servers (3), and a payment  
5 server (5) connected to it, secure electronic transactions being performed using a secure electronic transactions protocol, comprising the exchange of digital certificates, uniquely identifying the relevant transaction participants and also attesting their privileges at the merchant server,  
10 said certificates being managed by a Trusted Third Party Server (9) being connected too to said multimedia network, said payment servers 5 being enabled to validate the digital certificates presented and to process authorisation concerning the payment, said customer stations comprising  
15 transactions management means (10), fit for performing said secure electronic transactions protocol and for managing said certificates for the customer station,  
c h a r a c t e r i z e d i n a remote customer agent (13), managed by agent parameters received or to be  
20 received from said customer station (2) and thus, under the control of said parameters, assisting or representing the customer station in a negotiation process, including selecting products to be presented by the merchant server (3), and payment for selected products in a secure way,  
25 under control of said secure electronic transactions protocol and said certificates, being managed by said transactions management means (10).

2. System according to claim 1,  
c h a r a c t e r i z e d i n that said customer station  
30 (2) comprises an agent interface 12, fit for transmission of codes, parameters and certificates between said customer agent (13) and said transactions management means (10).

3. System according to claim 1,  
c h a r a c t e r i z e d i n a remote merchant agent  
35 (14), managed by agent parameters received or to be

received from said merchant station (3) and thus, under the control of said parameters, assisting or representing the merchant station in a negotiation process, including presenting products to the customer agent (13) or the customer station (3), and to have paid for products being selected by the customer agent (13) or the customer station (3), in a secure way, under control of said secure electronic transactions protocol and said certificates.

4. System according to claim 2,  
10 c h a r a c t e r i z e d i n that said negotiation and payment process by said customer agent (13) and said merchant agent (14) is performed within an agent negotiation server (11), connected to said multimedia network (1).

15 5. System according to claim 1,  
c h a r a c t e r i z e d i n that, within said secure electronic transaction protocol, for authentication and authorisation said customer agent (13) transmits a token is encapsulated, comprising an authorisation code for opening  
20 up said transactions management means (10).

6. System according to claim 5,  
c h a r a c t e r i z e d i n that said token is stored within the customer agent (13) in an encrypted form, using a random key, being generated at the customer station (2)  
25 for each new payment process.

7. System according to claim 5,  
c h a r a c t e r i z e d i n that both the customer station (2) and the customer agent (13) comprise a specific communication certificate, payment start messages being  
30 communicated to said transactions management means (10) in encrypted form, using a random session key which, in turn, is sent over in encrypted form, using the customer station's public key related to said communication certificate, said message being signed with the customer  
35 agent's private key related to said communication

certificate and a time stamp being added to said message in order to prevent replay by malicious parties.

8. Method for the execution of secure transactions in a multimedia network, comprising a multimedia network with  
5 customer stations (2), merchant servers (3), and a payment server (5) connected to it, secure electronic transactions being performed using a secure electronic transactions protocol, comprising the exchange of digital certificates, uniquely identifying the relevant transaction participants  
10 and also attesting their privileges at the merchant server, said certificates being managed by a Trusted Third Party Server (9) being connected too to said multimedia network, said payment servers 5 being enabled to validate the digital certificates presented and to process authorisation  
15 concerning the payment, said customer stations comprising transactions management means (10), fit for performing said secure electronic transactions protocol and for managing said certificates for the customer station, moreover, comprising a remote customer agent (13), managed by agent  
20 parameters received or to be received from said customer station (2) and thus, under the control of said parameters, assisting or representing the customer station in a negotiation process, including selecting products to be presented by the merchant server (3), and payment for  
25 selected products in a secure way, under control of said secure electronic transactions protocol and said certificates, being managed by said transactions management means (10), while, moreover, said customer station (2) comprises an agent interface (12), fit for transmission of  
30 codes, parameters and certificates between said customer agent (13) and said transactions management means (10), and, besides, a remote merchant agent (14), managed by agent parameters received or to be received from said merchant station (3) and thus, under the control of said  
35 parameters, assisting or representing the merchant station in a negotiation process, including presenting products to

the customer agent (13) or the customer station (3), and to have paid for products being selected by the customer agent (13) or the customer station (3), in a secure way, under control of said secure electronic transactions protocol and  
5 said certificates, characterized in the following communication steps:

in a first step, said customer agent (13) requests said merchant agent (14) to pay by credit card, and the merchant agent then informs said merchant server (3) of the  
10 requested payment, while parallel to that the customer agent (13) initialises said transactions management means (10);

in a second step, a standard secure electronic transaction procedure is performed by the transactions management means  
15 (10), the merchant server (3) and the payment gateway server (5);

in a third, final step, after completion of the payment process, the merchant server (3) informs the merchant agent (14) of that completion of the payment process, and the  
20 merchant agent (14) passes this message on to the customer agent (13), which notifies the customer station (2) of the payment completion.